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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,625	01/11/2001	Ralph H. Echols	2000-IP-001727	8980
20558	7590	01/21/2004		
KONNEKER & SMITH P. C. 660 NORTH CENTRAL EXPRESSWAY SUITE 230 PLANO, TX 75074			EXAMINER CECIL, TERRY K	
			ART UNIT 1723	PAPER NUMBER

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/758,625	ECHOLS ET AL.	
	Examiner	Art Unit	
	Mr. Terry K. Cecil	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-6, 8, 10, 15 and 84-85 and 87-97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-6, 8, 10, 15 and 84-85 and 87-97 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 10, 15, 84, and 91-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gano (U.S. 6,478,091) in view of Curlett (U.S. 4,683,944). As shown in e.g. figures 5A and 5B, Gano discloses a plurality of telescoped tubular members, wherein the inner tube is perforated and there are no other tubular members within the inner tubular member. Gano also discloses lines 83 extending longitudinally in a conduit 81 between the members but does not teach the lines to be embedded in the sidewall material of the inner tubular member. However, such is taught by Curlett. Curlett discloses a tubular conduit for either drilling or production in a well bore (col. 21, lines 51-58). The tubular casing 366 includes well screen 408 and embedded hydraulic lines 372 for delivering downhole chemicals and also line 374 for elongated electrical lines 376 communicating with downhole sensors ,e.g. pressure sensors (figures 24-28) [as in claims 10, 15 and 84, 91-93, 96-97]. Curlett also discloses flow control valves that are solenoid actuated in communication with the lines [as in claims 94-95]. It is considered that it would have

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been obvious to one ordinarily skilled in the art at the time of the invention to have the embedded conduits/lines of Curlet in the inner tubular sidewall of Gano, since Curlet teaches the benefit of providing electrical parameter sensors for well management purposes and to gather information relating to the subterranean formation (col. 3, lines 3-29) in order to optimize production of the well (col. 4, lines 60-68; and cols. 18-21). The embedded configuration would also protect the lines from the high pressure conditions that may exist downhole.

3. Claim 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gano in view of Curlett as applied to claim 15 above and in further view of Jones (U.S. 6,227,303 B1). Gano in view of Curlett does not teach a generally tubular protective shield lining each of the flow passages. However, Jones teaches tubular insert shields 20a lining each the flow passages [as in claim 87]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the shields of Jones in the invention of Gano, as modified by Curlett, since Jones teaches the benefit of preventing erosion (col. 5).

4. Claim 88 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gano in view of Curlett and Jones as applied to claim 87 and in further view of Swearingen (U.S. 5,392,862). Gano in view of Curlett and Jones has been expanded above and teaches shields having a fixed geometry and that extend entirely through the length of the flow passage in a sidewall material that is nonmetallic]. But does not teach a retainer disposed between the shield and the flow passage. Swearingen teaches a retainer 39 [as in claim 88] that is disposed between a nozzle insert and a flow passage. It is considered that it would have been obvious to one ordinarily

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skilled in the art at the time of the invention to have the retainer 39 of Swearingen between the shield insert and flow passage of Gano, as modified by Curlett and Jones, since Swearingen teaches the benefit of a retaining means for an inserted part in the casing of a well bore structure.

5. Claim 89 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gano in view of Curlett as applied to claim 15 above and in further view of Brockman. The sidewall material can be plastic (as non-metallic material) or can be a composite (col. 3, lines 4-6) [as in claim 89]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the casing sidewall material of Gano, as modified by Curlett to be a composite material, since Brockman teaches the benefit of a material that is suitable for having monitoring lines embedded therein.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gano in view of Curlett, Brockman and Jones. Gano in view of Curlett and Brockman has been expanded above and teaches all the limitations of claim 5 except shields lining the flow passages. However, Jones teaches tubular insert shields 20a lining each the flow passages [as in claim 5]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the shields of Jones in the invention of Gano, as modified by Curlett and Brockman, since Jones teaches the benefit of preventing erosion (col. 5).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gano in view of Curlett, Brockman and Jones as applied to claim 5 above and in further view of Swearingen

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(U.S. 5,392,862). Gano in view of Curlett, Brockman and Jones has been expanded above. And also teaches shields having a fixed geometry and that extend entirely through the length of the flow passage in a sidewall material that is nonmetallic [as in claim 6]. However, a retainer disposed between the shield and the flow passage is not taught. But Swearingen teaches a retainer 39 that is disposed between a nozzle insert and a flow passage. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the retainer 39 of Swearingen between the shield insert and flow passage of Gano, as modified by Curlett, Brockman and Jones, since Swearingen teaches the benefit of a retaining means for an inserted part in the casing of a well bore structure. As shown in e.g. figure 3 of Swearingen, upon modification the retainer would surround the entire outer side surface of its shield structure [as in claim 6]. It also would have been obvious to the skilled man for the retainer to have a degree of flexibleness in order effect insertion of the retainer into the flow passage thereof [as in claim 6].

8. Claims 8 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gano in view of Curlett and in further view of Miller et al. (U.S. 3,099,318). Gano in view of Curlett has been expanded above and teaches all the limitation of claim 8 except the outer perforated tubular jacket and inflation member that radially expands to move the jacket into engagement with the well bore. Miller teaches an outer jacket 45 and an expandable member media 43 (col. 7, lines 40-43) [as in claims 8 and 90]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the expandable member and the

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outer jacket of Miller in the invention of Gano in view of Curlett, since Miller teaches the benefit of preventing the accumulation of earth and sand particles in the well (col. 1, lines 14-19).

9. Claim 85 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gano in view of Curlett as applied to claim 15 above, and in further view of Bearden et al. (U.S. 3,712,373).

Claim 85 has the limitation of a filter media that is recessed in the sidewall. Bearden teaches an embodiment that includes layers of increasing finest, wherein the middle layer would be considered "recessed" in the side wall [as in claim 85]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the additional layers of Bearden in within the inner tubular member of Brockman, since Bearden teaches the benefit of preventing surface plugging (col. 1, lines 53-55).

Response to Arguments

10. Applicant's arguments with respect to the claim have been considered but are moot in view of the new grounds of rejection.

Conclusion


11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the

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mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 at the Carlisle campus in Alexandria, Virginia for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:30a to 4:30p, on at least four days during the week M-F.
- Wanda Walker, the examiner's supervisor, can be reached at (571) 272-1151 if attempts to reach the examiner are unsuccessful.
- The Fax number for this art unit for official faxes is 703-872-9306.


Mr. Terry K. Cecil
Primary Examiner
Art Unit 1723

TKC
January 13, 2004